

Cs <sub>7</sub> O	<i>hP</i> 24	(187) <i>P</i> -6 <i>m</i> 2 – nk <sup>2;3</sup> ha
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**Cs<sub>7</sub>O** [1]

Structural features: One Cs<sub>11</sub>O<sub>3</sub> unit (three face-sharing OCs<sub>6</sub> octahedra) for ten additional Cs atoms.

Simon A. (1976) [1]

Cs<sub>7</sub>O

$a = 1.6393$ ,  $c = 0.9193$  nm,  $c/a = 0.561$ ,  $V = 2.1395$  nm<sup>3</sup>,  $Z = 3$

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
Cs1	6 <i>n</i>	. <i>m</i> .	0.18759	0.81241	0.21832		single atom O
Cs2	3 <i>k</i>	<i>mm</i> 2	0.55070	0.44930	<sup>1</sup> / <sub>2</sub>		14-vertex polyhedron Cs <sub>14</sub>
Cs3	3 <i>k</i>	<i>mm</i> 2	0.88824	0.11176	<sup>1</sup> / <sub>2</sub>		icosahedron Cs <sub>12</sub>
O4	3 <i>j</i>	<i>mm</i> 2	0.25366	0.74634	0		octahedron Cs <sub>6</sub>
Cs5	3 <i>j</i>	<i>mm</i> 2	0.44790	0.55210	0		non-colinear O <sub>2</sub>
Cs6	3 <i>j</i>	<i>mm</i> 2	0.78396	0.21604	0		15-vertex Frank-Kasper Cs <sub>15</sub>
Cs7	2 <i>h</i>	3 <i>m</i> .	<sup>1</sup> / <sub>3</sub>	<sup>2</sup> / <sub>3</sub>	0.20144		non-coplanar triangle O <sub>3</sub>
Cs8	1 <i>a</i>	-6 <i>m</i> 2	0	0	0		15-vertex Frank-Kasper Cs <sub>15</sub>

Transformation from published data: -*x*, -*y*, -*z*

Experimental: single crystal, diffractometer, X-rays, R = 0.046, T = 253 K

Remarks: Cell parameters determined at 273 K.

References: [1] Simon A. (1976), Z. Anorg. Allg. Chem. 422, 208-218.